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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,424

08/05/2003

Mohammad M. Samii

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11/15/2004

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

STEWART JR, CHARLES W

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/634,424	Applicant(s) SAMII, MOHAMMAD M.	
	Examiner Charles W. Stewart, Jr.	Art Unit 2853	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 23 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/165,226.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/15/03 &amp; 8/5/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Detailed Action***

1. Applicant has cancelled claims 15-22 and 24-25.

***Claim Rejection – 35 U.S.C. § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claim 1 is rejected under U.S.C. 102 (b) as being anticipated by Tamura et al. US 4,794,463.

Tamura et al, discloses a printhead assembly (fig. 1, 2) comprising: a plurality of ejection elements, each of the ejection elements configured to cause fluid to be ejected when the ejection element is activated; and a plurality of photosensors 15, each photosensor coupled to one of the ejection elements, each photosensor configured to generate an activation signal that causes the ejection element coupled to the photosensor to be activated when the photosensor is illuminated by a light source 5.

***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine ground in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 f.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re*

Art Unit: 2853

*Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 428, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (May be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-14 and 23 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of Samii U.S. Patent No. 6,799,819 B2.

In claim 2, with respect to claim 4, wherein the photosensors are photodiodes.

In claim 3, with respect to claim 5, wherein the photosensors are phototransistors.

In claim 4, with respect to claim 1, a plurality of amplifiers, each photosensor being coupled to one of the ejection elements via one of the amplifiers.

In claim 5, with respect to claim 1, wherein each amplifier comprises a field effect transistor (FET).

In claim 6, with respect to claim 1, wherein each amplifier comprises a first and a second FET, each FET including a gate, a source, and a drain.

In claim 7, with respect to claim 1, wherein each amplifier further comprises a

Art Unit: 2853

latch, and wherein the latch of each amplifier is coupled between one of the photosensors and the gate of the first FET of the amplifier, and wherein the first FET of each amplifier is configured to be turned on when the photosensor coupled to the first FET via the latch is illuminated by the light source.

In claim 8, with respect to claims 2 and 6, wherein the second FET of each amplifier is coupled to the first FET of the amplifier and to one of the ejection elements, the second FET of each amplifier configured to provide a drive signal for activating the ejection element coupled to the second FET when the first FET of the amplifier is turned on.

In claim 12, with respect to claim 9, wherein the plurality of ejection elements are organized into four page-wide-arrays of ejection elements.

In claim 13, with respect to claims 7 and 10, wherein the printhead assembly is a page-wide-array printhead assembly.

In claim 14, with respect to claim 6, wherein each photosensor coupled to one of the ejection elements is positioned substantially adjacent to the ejection element that it is coupled to.

In claim 23, with to claim 12, an ejection element that causes fluid to be ejected from an associated nozzle chamber when activated; and a photosensor coupled to the ejection element, the photosensor configured to generate an activation signal that causes the ejection element coupled to the photosensor to be activated when the photosensor is illuminated by a light source.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of ejection elements, each of the ejection

Art Unit: 2853


elements configured to cause fluid to be ejected when the ejection element is activated in order to achieve a better printing quality while in a printing operation.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Charles Stewart, Jr. whose telephone number is (571) 272-2154.

Charles Stewart, Jr.

November 2, 2004



**Stephen D. Meier**  
**Primary Examiner**